

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Nora Mead Brownell, and Sudeen G. Kelly.

Wyckoff Gas Storage Company, LLC

Docket Nos. CP03-33-002

ORDER AMENDING CERTIFICATE

(Issued April 11, 2006)

1. On November 22, 2005, Wyckoff Gas Storage Company (Wyckoff) filed an application pursuant to section 7(c) of the Natural Gas Act (NGA) to amend the certificate of public convenience and necessity issued by the Commission on October 6, 2003 in Docket No. CP03-33-000 authorizing Wyckoff to construct and operate a natural gas storage facility in Steuben County, New York (the Wyckoff Storage Project).¹ By this application, Wyckoff seeks, among other things, amended certificate authorization to relocate certain of the approved facilities, downsize certain facilities, and to phase the construction of certain facilities. As discussed below, the Commission finds that the proposed amendments are required by the public convenience and necessity and grants the requested amendment to Wyckoff's certificate authority, subject to the conditions imposed herein.

I. Background

2. Wyckoff Gas Storage Company, LLC is a wholly-owned subsidiary of Greyhawk Gas Storage Company, LLC (Greyhawk), a Delaware limited liability company. When the Wyckoff project was certificated, Greyhawk was jointly owned by Falcon Gas Storage Company, Inc. (Falcon), a Delaware corporation, and Emera Energy Inc. (Emera), a Canadian corporation. Subsequently, Falcon acquired Emera's interest in

¹ 105 FERC ¶ 61,027 (2003).

Greyhawk, and on January 14, 2005, SemGas, L.P. (SemGas) of Tulsa, Oklahoma purchased Greyhawk from Falcon, thus acquiring Wyckoff.² SemGas is a wholly owned subsidiary of SemGroup, L.P. (SemGroup), a privately held midstream energy services company, and both are organized under the laws of the State of Oklahoma.

3. The Wyckoff Storage Project consists of two almost-depleted natural gas reservoirs: an Onondaga reef and an Oriskany sandstone formation. The reef structure overlies the sandstone formation. Wyckoff estimated the total capacity of the two reservoirs to be 10.3 Bcf (6.0 Bcf in the Onondaga reef reservoir and 4.3 Bcf in the Oriskany sandstone reservoir) at a maximum 1,790 psi stabilized bottom-hole shut-in reservoir pressure. Wyckoff proposed to construct and develop the two reservoirs as a single natural gas facility, with the reservoirs connected through a common header system.

4. On October 6, 2003, the Commission issued Wyckoff a certificate under Part 157, Subpart A of the Commission's regulations in Docket No. CP03-33-000; a blanket certificate under Part 157, Subpart F in Docket No. CP03-34-000; and a blanket certificate under Part 284, Subpart G in Docket No. CP03-35-000 authorizing Wyckoff to provide firm and interruptible storage services.³ The October 2003 Order also authorized Wyckoff to charge market-based rates for its storage services. In addition, the October 2003 Order authorized National Fuel Gas Supply Corporation (National Fuel) in Docket No. CP03-79-000 to abandon, upon conversion of the Wyckoff field to storage operations, its Line Z-67 pipeline, which historically transported natural gas production from the Wyckoff field to National Fuel's system.

5. Under its existing certificate, Wyckoff is authorized to install two 4,735 horsepower (hp) compressor units and two dehydration units, to yield a total of 9,470 hp of compression, with a maximum injection rate of 250 MMcf per day (MMcf/d) and a maximum withdrawal rate of 400 MMcf/d. Also, Wyckoff is authorized to drill six new injection/withdrawal (I/W) wells, convert three existing gas producing wells to I/W wells, and utilize two existing wells as observation wells. The total authorized storage capacity

² On October 5, 2005, Greyhawk and an affiliate of Kaiser-Francis Oil Company, a privately held oil and gas exploration company, entered into an agreement whereby the Kaiser-Francis affiliate will purchase a 49 percent interest in Wyckoff. The closing of the sale is subject to several conditions precedent, including, among other things, approval by the Commission of this certificate amendment.

³ 105 FERC ¶ 61,027 (2003).

of the project is 11,846 MMcf (6,966 MMcf in the Onondaga reef reservoir and 4,880 MMcf in the Oriskany sandstone reservoir), the total authorized working gas capacity is 6,117 MMcf, and the estimated cushion gas capacity is 5,729 MMcf.

6. In addition, the current certificate authorizes Wyckoff to construct, own and operate two pipeline interconnection facilities. One interconnection consists of approximately 3.6 miles of 20-inch pipeline to the north (the North Lateral) capable of transporting 400 MMcf/d of natural gas to connect the storage facility to the Tennessee Gas Pipeline Company (Tennessee) and the Columbia Gas Transmission Corporation (Columbia) systems using a single meter station yard. The other pipeline interconnection consists of approximately 7.7 miles of 20-inch pipeline to the south (the South Lateral) capable of transporting 400 MMcf/d to connect the storage facility to the Dominion Transmission, Inc. (Dominion) system.

7. The certificates issued to Wyckoff by the October 2003 Order were conditioned upon Wyckoff constructing the facilities and placing them into service within three years of the October 6, 2003 date of the order. During this period, Wyckoff has redesigned various aspects of the project, and reconsidered its initial project requirements, resulting in the instant application to amend its certificate.

II. Proposal

8. Wyckoff seeks amendment of its certificate in Docket No. CP03-33-000 to make certain modifications to its Wyckoff storage project to improve project economics and operations and reduce environmental impacts upon surrounding landowners. As discussed below, these modifications fall into three categories: facility relocation, facility downsizing, and the phasing of project construction. In addition, Wyckoff states that it intends to continue Line Z-67 in operation following its abandonment by National Fuel to transport gas between Wyckoff's storage facilities and National Fuel's system. Wyckoff also requests that the Commission confirm the previously approved maximum reservoir pressure for the field. Wyckoff seeks no change to the storage capacity, reservoir pressure, deliverability, storage services, and rates approved by the October 2003 Order.

A. Facility Relocations

9. Wyckoff proposes to relocate the compressor station, consolidate the surface locations of the six new I/W wells, eliminate the laterals associated with the six new wells, modify the laterals associated with the three existing production wells to be converted to I/W wells, and slightly modify the routes of the North and South Laterals. These proposed changes consolidate project facilities within a 15-acre parcel owned in fee by Wyckoff.

10. The required compressor station was approved to be located at the northern end of the 15-acre Wyckoff parcel, which lies on the southern edge of the storage field. Wyckoff proposes to relocate the compressor station approximately 900 feet to the southern end of the 15-acre Wyckoff property. With this relocation, the compressor station will be farther away from New York State Route 417 and residences, thereby eliminating the visual impact of the facility and reducing the noise impacts of the compressor on noise sensitive areas.

11. As presently certificated, the six new I/W wells were to be drilled from six separate locations spaced throughout the storage field. The surface location of each well would have been on land owned by entities other than Wyckoff, and each well would have required its own well pad, access to the pad during drilling operations and for maintenance, and lateral pipeline interconnections to the compressor and/or other of the proposed wells. Wyckoff has determined that all six wells can be directionally drilled from a central location and therefore proposes to change the surface location to the northern end of the 15-acre Wyckoff property. Each well will be directionally drilled to its previously authorized downhole well location. Wyckoff states that relocating the wells to a central location will reduce impacts on surrounding landowners and overall environmental impacts by reducing total land use requirements, access road requirements and lateral pipeline requirement. Wyckoff further states that locating the wells close to the compressor station will be advantageous for operation and maintenance purposes.

12. Most of the previously approved field laterals associated with the six new wells will be unnecessary with the proposed central relocation of those wells. While Wyckoff proposes no change with respect to the conversion of the three existing production wells, it is proposing modifications to portions of the lateral lines to connect these three existing wells (the Chace, Banks, and Cornell wells) to the compressor station.

13. Wyckoff proposes to eliminate the approved lateral line for the Chace well and to add a new, 0.55 mile, 6-inch diameter lateral running southwest from the Chace well to the Banks lateral near the Cornell well. The Cornell well will connect to the Banks lateral, at which point that "Cornell/Banks" lateral connecting the Cornell well to the compressor station will increase in diameter from 6 to 8 inches. To avoid crossing an agricultural field, Wyckoff proposes to change a portion of the routes of the Cornell/Banks and Chace laterals so that south of the Cornell well they run approximately 0.25 miles along an existing road until the line is south of the agricultural field, and then approximately 0.35 miles east near an abandoned farm road to the compressor station.

14. To avoid crossing the same agricultural field, the North and South Laterals will now follow the same route as the Cornell/Banks and Chace laterals away from the compressor station. The North Lateral will run in the same trench as the Cornell/Banks and Chace laterals, until it rejoins the previously approved North Lateral route. The South Lateral, when built, will be in the same right-of-way as the Cornell/Banks, Chace, and North laterals beginning at the compressor station. At the point where the three lines turn north, the South Lateral will turn south and proceed along the previously approved South Lateral route.

B. Phasing of Construction

15. As stated above, Wyckoff currently is authorized to install two 4,735 hp compressor units and two dehydration units to yield a total of 9,470 hp of compression. Due to current market demand, Wyckoff has determined that one half of the approved 9,470 hp of compression and one of the two approved dehydration units will not be required initially. Wyckoff has also determined that the 7.7-mile South Lateral will not be required initially. Therefore, Wyckoff proposes to phase the construction of the Wyckoff Storage Project. Wyckoff proposes that Phase I will consist of installing only 4,740 hp of compression and the single dehydration unit;⁴ converting the three existing wells to I/W wells and the two existing production wells to observation wells, as already approved; constructing the 6 new I/W wells at the new surface location and the associated piping, as described above; and constructing the 3.6 miles of 16-inch diameter pipeline comprising the North Lateral.

16. Wyckoff indicates that all of the originally authorized compression and dehydration units may be needed within a few years of operations, if market demand develops as anticipated. Thus, in Phase II, Wyckoff would install the remaining 4,730 hp of compression, the second dehydration unit, and construct the 7.7-mile South Lateral. Wyckoff requests that the time for the installation of the Phase II facilities be extended for a period of three years following the Commission's approval of the instant request for certificate amendment.

⁴ Specifically Wyckoff proposes to install two 2,370 hp units for a total of 4,740 hp. Wyckoff states that two smaller compressor units, instead of one 4,735 hp unit, are being proposed for reliability purposes. The proposed reduction in compression will reduce Wyckoff's average injection capability from 250 MMcf/d to 125 MMcf/d, a rate Wyckoff deems satisfactory for initial operations. Wyckoff states that withdrawal capability will not be affected, as compression is not normally required during the withdrawal process.

C. Facility Downsizing

17. Wyckoff has determined that the 3.6-mile North Lateral to interconnect with Tennessee and Columbia should be reduced in size from 20 to 16 inches in diameter. Wyckoff maintains that this reduction in size will reduce project costs without significantly reducing total transport capacity.

D. Use of Line Z-67

18. National Fuel currently owns and operates an 8-inch diameter pipeline, Line Z-67, and associated facilities, which connects the Wyckoff field to National Fuel's system at its Line Z-20(S). Since production at the Wyckoff field will cease when the field is converted to storage, and since Wyckoff is planning to construct a new pipeline to the south in the same right-of-way as Line Z-67, it was expected that Line Z-67 would no longer be needed. Thus, in the October 2003 Order, the Commission authorized National Fuel to abandon in place its Line Z-67, specifically consisting of 35,670 feet of 8-inch diameter pipeline, two aboveground valves, one bridel valve connection, and one 100 hp skid-mounted compressor. The northern portion of Line Z-67, which consists of approximately 19,068 feet of pipeline from the field to the compressor, and the compressor itself, were installed as gathering facilities and never functionalized as transmission. The southern portion of Line Z-67, approximately 16,602 feet extending from the compressor to Line Z-20(S) is currently functionalized as transmission. However, the entire line would be abandoned in place upon conversion of the field from production to storage, except for any sections that might be removed by Wyckoff in response to landowner requests.⁵ The October 2003 Order implicitly authorized Wyckoff's acquisition of Line Z-67, by its recognition that Wyckoff, and not National Fuel, was to be responsible for any pipe removal.

19. Wyckoff states that under the terms of its agreements with National Fuel, Wyckoff will assume ownership of Line Z-67 and acquire the right-of-way when National Fuel's abandonment becomes effective, and that this will occur whenever Wyckoff is ready to commence the injection of storage gas into the Wyckoff field. Because Wyckoff, in this request for certificate amendment, proposes to defer construction of the South Lateral for up to three years, Wyckoff states that it now intends to utilize Line Z-67 to transport injection and withdrawal volumes between the storage field and National Fuel's system. Wyckoff asserts that since the total value of Line Z-67 and all associated facilities is estimated at less than \$1 million, and is below the monetary limits set forth in Part

⁵ 105 FERC ¶ 61,027 at P 10.

157.208(d) of the Commission's regulations, it will acquire and commence operating Line Z-67, including the interconnect with National Fuel's Line Z-20(S), under its Part 157, Subpart F blanket certificate.

20. Additionally, Wyckoff recognizes that when it commences operation of Line Z-67, the entire 35,670 feet of pipeline, including the portion classified by National Fuel as gathering, will be jurisdictional facilities operated as part of the Wyckoff storage project. Wyckoff also recognizes that Line Z-67 cannot be operated at pressures exceeding the 600 psig pressure previously authorized by the Commission, without further Commission authorization.⁶

III. Notice, Interventions, and Protests

21. Public notice of Wyckoff's application was published in the *Federal Register* on December 23, 2005 (70 *Fed. Reg.* 76,277). Mr. Lawrence E. Atkins and Ms. Diane M. Dailey, jointly, and Cornell Dairy Farms filed timely, unopposed motions to intervene. Timely unopposed motions to intervene are automatically granted by operation of Rule 214 of the Commission's regulations.⁷ Mr. Lawrence E. Atkins and Ms. Diane M. Dailey state that they are filing a "protest or intervention regarding Docket # CP03-33," and include comments. Cornell Dairy Farms' pleading also includes comments by Mr. Joe Cornell.

22. The following individuals or agencies, prior intervenors in Docket No. CP03-33-000, also filed comments: Mr. Larry Banks, Mr. Robert C. Gardiner, the Steuben County Industrial Development Agency, the Steuben County Soil & Water Conservation District, and the New York State Department of Agriculture and Markets.

23. In addition, comments in support of the proposed modifications to the project were filed on February 9, 2006 by Mr. James G. Bacalles, Member of the State Assembly of New York, and on March 16, 2006, by Senator George H. Winner, Jr. of the New York State Senate, 53rd District.

⁶ *National Fuel Gas Supply Corporation*, 68 FERC ¶ 61,078 (1994).

⁷ 18 C.F.R. § 214 (2003).

24. On January 12, 2006, Wyckoff filed an answer to the comments of the local landowners, emphasizing that none of the commenting parties specifically oppose the proposed facility relocations and configurations, and that local landowners will continue to be treated fairly with respect to the acquisition of property rights required for the project.

IV. Discussion

25. Since Wyckoff's application pertains to facilities for natural gas services in interstate commerce subject to the jurisdiction of the Commission, the proposal is subject to the requirements of subsections (c) and (e) of Section 7 of the NGA.

A. Certificate Policy Statement

26. The Commission's September 15, 1999 Policy Statement provides guidance as to how it will evaluate proposals for certificating new construction.⁸ The Certificate Policy Statement established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. Our goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of the unnecessary exercise of eminent domain or other disruptions of the environment.

27. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any other adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified, after

⁸*Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *order on clarification*, 90 FERC ¶ 61,128, *order on clarification*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis where other interests are considered.

28. Wyckoff is a new entrant in the natural gas storage market and has no existing facilities, services, or customers. Thus, the October 2003 Order found that there will be no subsidization of the project by existing customers, and further, that with the authority to charge market-based rates for its services, Wyckoff will assume all economic risk associated with the project. The project modifications proposed in Wyckoff's application to amend the certificate granted by the October 2003 Order do not affect the Commission's prior finding of no subsidization.

29. Nor do the proposed modifications to Wyckoff's certificate authority change the Commission's previous findings that the Wyckoff Storage Project will have no adverse impact on existing customers and on existing service providers and their captive customers. In particular, Wyckoff's new proposal to utilize National Fuel's Line Z-67 when the Wyckoff field is converted from production to storage will not adversely affect National Fuel because at that point National Fuel will abandon Line Z-67, as there will no longer be any natural gas production from the Wyckoff field to transport to the National Fuel system. Further, National Fuel will benefit from Wyckoff's use of Line Z-67 to transport injection and withdrawal volumes between the storage field and National Fuel, as it provides National Fuel with a new natural gas storage option.

30. In the October 2003 Order, the Commission found that any adverse impacts on landowners and communities along and proximate to the proposed project will be minimal. As explained below, the individual modifications to the certificated project proposed by Wyckoff either reduce those impacts, have no effect on landowner impact, or merely change the specific landowners impacted by the project without changing the degree or level of adverse impact.

31. As stated, *supra*, Wyckoff originally proposed, and was authorized, to vertically drill six new I/W wells from six separate locations throughout the storage field. The surface location of each well would have been on land that was not owned by Wyckoff, and each well would have required its own pad, access to the pad, and lateral pipeline interconnection to the compressor or to the other proposed wells. As a result, a number of the landowners of property on which the new wells would have been constructed raised objections to the project or concerns regarding the impact of the project on their property or on their use of the property. The change to directional drilling of the six new I/W wells from one centralized location, on the northern end of Wyckoff's own property,

will significantly reduce adverse impacts on landowners. This modification eliminates the need for Wyckoff to use land owned by anyone other than itself or to obtain land use rights to six different tracts of land, thereby reducing the total land required for the wells, reducing access road requirements, and reducing the total field lateral requirements for the project.

32. The relocation of the compressor station to the southern end of Wyckoff's property does not change the impact of the project on affected landowners and communities since the compressor station will still be located on Wyckoff's own property.

33. The downsizing of the North Lateral from 20 to 16 inches in diameter and the reduction in initial compression required for the project will not affect landowner impacts because such modifications will not change the location of those facilities or change construction requirements or procedures. Similarly, Wyckoff's deferral of the construction of the South Lateral will not affect landowner impacts because when it is built, its location and construction requirements will remain the same as they would have been if it had been installed as a part of Phase I of the project. However, Wyckoff points out that in the unlikely event that the South Lateral is never installed, the impacts of the project on landowners would be further reduced. In addition, continuing the existing and historical operation of Line Z-67 for natural gas storage instead of natural gas production will have no impact on landowners.

34. As described, *supra*, Wyckoff has proposed some changes to the lateral lines connecting the three existing wells (the Chace, Banks, and Cornell wells) to the compressor station, since Wyckoff seeks to change the location of the compressor station. These lateral line changes involve Wyckoff's both adding some new lateral line and eliminating some of the previously approved lateral lines, as well as slightly modifying the paths of those lines. However, these changes should not result in a significant, if any, increase in adverse landowner impacts. Wyckoff is also proposing to increase the diameter of the Cornell/Banks lateral from six to eight inches, but such a minimal increase in diameter will not require a larger right-of-way than would have been required for the six-inch diameter lateral and, therefore, will have no additional impact on landowners. Further, to the extent Wyckoff is proposing to slightly modify the routes of the North and South Laterals, the proposed new paths will follow the various routes of, or lie in the same trenches as, the existing Chace and Cornell/Banks laterals, thereby avoiding additional landowner impacts from such modifications.

35. Several of the landowner intervenors raise concerns that Wyckoff has not yet reached agreement with them regarding the property rights Wyckoff will require from them for the project. Mr. Larry Banks states that he and Wyckoff have not agreed on any

terms regarding the use of his land, such as rights-of-way, compensation for remaining gas, and gas storage. Mr. Banks states that although he does have an agreement with Greyhawk, the prior owner, Wyckoff apparently will not honor that agreement.

36. Mr. Robert Gardiner also states no agreement has been reached with Wyckoff that would provide Wyckoff with the right-of-way to the abandoned road Wyckoff wishes to use. Mr. Gardiner details his attempts to negotiate with Wyckoff and is concerned that Wyckoff is more interested in using eminent domain than in fair and open negotiation. Both Mr. Banks and Mr. Gardiner maintain that the necessary permits should not be granted and construction should not begin until satisfactory agreements have been made with the affected landowners.

37. Mr. Joe Cornell of Cornell Dairy Farms raises the issue of the appropriate compensation for the remaining gas in place in the storage field. Mr. Cornell asserts that the existing leases have not accounted for inflation or been updated to current standards.

38. Mr. Lawrence E. Akins and Ms. Diane M. Dailey, in their joint comments, state that they have no existing leases or agreements with Wyckoff or any other natural gas company that would allow Wyckoff or anyone to have above-ground access to their property on Potter Road, Jasper, Steuben County, New York, or below-ground storage rights.

39. In its answer to the landowner comments, Wyckoff acknowledges that Mr. Akins and Ms. Dailey are correct that, at the present time, Wyckoff does not possess any rights for the use of their property, which Wyckoff explains is not part of the storage field itself but, instead, adjoins the route of the approved South Lateral. Wyckoff states that it will be in contact with Mr. Akins and Ms. Dailey to seek a mutually acceptable agreement for the use of their property at an appropriate future time before construction begins on Phase II.

40. In response to Mr. Banks, Mr. Cornell, and Mr. Gardiner, Wyckoff states that it, in fact, already has the required rights under leases which Wyckoff acquired from Greyhawk. Wyckoff states that since those leases date from the 1960's, those landowners wish to renegotiate them. Wyckoff further states, however, that it is attempting to work out revised agreements with these landowners.

41. Under the Certificate Policy Statement, the Commission considers the extent to which the applicant has obtained rights-of-way by negotiation to minimize the use of eminent domain, as well as the extent to which the applicant has taken steps to mitigate adverse economic impacts on landowners. Wyckoff's instant proposal to relocate the six new wells to Wyckoff's own property mitigates adverse economic impacts on

landowners by obviating the need to obtain rights of way for the original sites of the six new wells. To the extent Wyckoff will still need to obtain rights-of-way from a limited number of property owners, Wyckoff has indicated that it is willing to work with landowners to reach fair agreements. It is not necessary that Wyckoff enter into all necessary right-of-way agreements prior to the Commission's grant of certificate approval for the project. If it becomes necessary for Wyckoff to seek eminent domain, the court will determine appropriate compensation.

42. With respect to the storage leasehold interests in the two subject reservoirs, Wyckoff states that it already has leasehold rights under existing leases with the commenters, but is attempting to work out revised agreements to the landowners' satisfaction. If agreements cannot be reached, the resolution of royalty payments and other economic issues will be made in an appropriate court of law, if necessary.

43. In the October 2003 Order, the Commission found that the Wyckoff Storage Project will serve a growing market for firm and interruptible storage services, and that these services will provide markets with greater storage and transportation options and enhance customers' capabilities to manage gas supplies. Specifically, the order found that these services will help meet the needs of the gas-fired electric generation market, help prospective customers meet peak period needs, minimize pipeline imbalances, and enhance load factors responsive to intra-month swings.⁹ The proposed modifications to the project do not diminish these public benefits. Indeed, the overall effect of Wyckoff's proposed modifications to the Wyckoff Storage Project is to reduce the adverse impacts on landowners, which the Commission has already determined would not be significant.

44. Based on the above considerations, the substantial public benefits of the amended Wyckoff Storage Project continue to outweigh any remaining adverse effect on landowners or communities. Consequently, the Wyckoff Storage Project, as amended, is required by the public convenience and necessity.

B. Rates

45. As presently certificated, Wyckoff is authorized to provide open-access services, including both firm and interruptible storage services and single and multi-cycle storage service, on a self-implementing basis at market-based rates. In this application, Wyckoff does not seek any changes to its authorization to charge market-based rates, and does not include any new or incremental services in the proposed amendment.

⁹ 105 FERC ¶ 61,027 at P 43.

46. As a condition to its grant of market-based rate authority, the October 2003 Order requires Wyckoff to notify the Commission if future circumstances significantly affect its market power status as determined by that order.¹⁰ Wyckoff states that the acquisition of Greyhawk by SemGas, and the forthcoming acquisition of a 49 percent interest in Wyckoff by an affiliate of Kaiser-Francis, does not impact the market power analysis on which the grant of market-based rate authority was originally based in the October 2003 Order, as neither SemGas, nor Kaiser-Francis, nor any of their affiliates or subsidiaries, have interests in any other storage fields or pipelines in the New York/Pennsylvania market area. However, Wyckoff notes that another subsidiary of SemGas owns all rights to the Avoca Storage Project, and that when SemGroup applies to the Commission to reactivate the Avoca Project, it will submit a new market power study reflecting the common ownership of Avoca and Wyckoff.¹¹ Wyckoff's market-based rate authority is subject to Wyckoff's compliance with the conditions set forth in Ordering Paragraph (G) of the October 2003 Order.¹²

C. Engineering Analysis

47. The Commission has evaluated Wyckoff's proposed modifications and concludes there are no engineering issues. The same number of wells will be drilled, except now they will be directionally drilled from a central well pad located on the compressor station site to their originally identified bottom-hole locations. No changes to inventory, deliverability or reservoir boundaries are proposed.

48. Ordering Paragraph (H)2 of the October 2003 Order provides that "the maximum shut-in reservoir pressure shall not exceed 1790 psi, without prior authorization of the Commission."¹³ In the instant application, Wyckoff requests the Commission to confirm its understanding that the authorized pressure of 1,790 psi is the maximum authorized reservoir pressure for the Wyckoff facility. The Commission confirms here, after review of the engineering data supplied in the original application and this amendment, that the maximum shut-in reservoir pressure of 1,790 psia is the measured bottomhole pressure.

¹⁰ 105 FERC ¶ 61,027 at P 62.

¹¹ Wyckoff Application at 5, n.4.

¹² 105 FERC ¶ 61,027 at 61,224.

¹³ *Id.*.

49. We reiterate that Wyckoff's certificate authorization is conditioned upon its adherence to the following:

(1) The maximum gas storage inventory stored in Wyckoff's Storage Field shall not exceed 11,846 MMcf, including remaining native gas-in-place (6,966 MMcf in Onondaga reef and 4,880 MMcf in Oriskany Sandstone) at 14.73 psia and 60 degrees F. Maximum stabilized shut-in reservoir pressure shall not exceed 1,790 psi bottomhole, without prior Commission authorization.

(2) Wyckoff shall file semi-annual reports in accordance with Section 157.214 (c) of the Commission's regulations. These reports shall continue to be filed until one year after the storage inventory volume has reached or closely approximates the maximum level defined in condition (1).¹⁴

D. Environmental Analysis

50. On January 10, 2006, we issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed Amended Wyckoff Gas Storage Project and Request for Comments on Environmental Issues (NOI). We received comments on the NOI from Gerald F. Cornell; Joe Cornell; Robert C. Gardiner; Larry Banks, Lawrence E. Akins and Diane M. Dailey; the U.S. Fish and Wildlife Service; the Steuben County Soil and Water Conservation District (SCSWCD); the Steuben County Industrial Development Agency (SCIDA); the New York State Department of Agriculture and Markets (NYSDAM); the New York Department of Environmental Conservation (NYSDEC); and Mr. James G. Bacalles of the State Assembly of New York.

51. Substantive environmental issues raised by the commenters are addressed in the appropriate sections of the environmental assessment (EA) prepared by our staff, and some of those issues are highlighted below. The EA addresses construction and operation, land use, soils, geology, vegetation, endangered and threatened species, water resources, wetlands, air and noise quality, cultural resources, and alternatives. The EA is available to the public upon request.

¹⁴ See 105 FERC ¶ 61,027 at P 68.

52. Several commenters are opposed to the project construction being undertaken during the winter months. On November 23, 2005 and January 6, 2006, Mr. John Lacey of the New York State Department of Agriculture and Markets (NYSDAM) filed comments that were supplemented by Mr. Matthew J. Brower of NYSDAM by letter dated January 23, 2006. In its comments, the NYSDAM presents the advantages of constructing across farmland from late spring to early fall. NYSDAM indicates that attempting topsoil stripping in early spring, through the thaw, early runoff, and conditions of a “liquid” state of soil consistence, would destroy the topsoil and be counterproductive.¹⁵

53. On December 22, 2005, Steuben County Soil and Water Conservation District (SCS&WCD) filed a letter agreeing with NYSDAM that pipeline construction for this project should not be undertaken in the winter months. SCS&WCD states snow covered ground is not conducive to topsoil stripping, since spring snow melt and rain would cause severe erosion on the stripped right-of-way. SCS&WCD states that pipeline construction on agricultural land in this area should not be undertaken until soil is relatively dry (late May to mid-June). SCS&WCD also asks whether the sediment and erosion plan addresses winter stripping of topsoil. Similarly, Mr. Larry Banks and Mr. Joe Cornell of Cornell Dairy Farms filed letters stating similar concerns.

54. Wyckoff states the NYSDAM’s comments address the need to ensure that construction and restoration activities are only undertaken in agricultural areas when weather and soil conditions are suitable. Wyckoff states it understands these concerns and, in addition to complying with all applicable construction manuals and procedures adopted by this agency and by NYSDAM, it will consult on site with the environmental inspector and NYSDAM representatives regarding such matters during the construction and restoration processes.

55. Wyckoff further states it does not disagree with any of these comments and recognizes their importance. Wyckoff notes, however, that several of the comments concern highly technical, site-specific conditions. These, it states, will be addressed by

¹⁵ The NYSDAM also addresses agricultural resources and technical data issues and recommendations. Situation-specific construction comments and recommendations were made concerning water diversion terrace construction details; interceptor drain line construction details; and bedrock soil used as backfill in agricultural lands. These issues are discussed in our staff’s EA.

Wyckoff's construction contractor on a site-specific basis and will be reviewed at that time with the environmental inspector and with NYSDAM's representative prior to construction.

56. We note that our staff's Upland Erosion Control Revegetation and Maintenance Plan (FERC staff's Plan) does not prohibit winter stripping of topsoil. However, Wyckoff has agreed to discuss details of topsoil stripping with the NYSDAM and the SCS&WCD for specific mitigation measures if topsoil stripping is performed in the winter. We believe this is adequate.

57. We have also included Environmental Condition 15 of this order, which requires Wyckoff to consult with the NYSDAM on use of the specifications in NYSDAM's Plan that are more stringent than the FERC staff's Plan and the FERC staff's Wetland and Waterbody Construction and Mitigation Procedures (FERC staff's Procedures) for construction and restoration of the project. This condition also requires Wyckoff to file a summary that identifies the provisions it will use from NYSDAM's Plan that are more stringent than the FERC staff's Plan and Procedures. The condition also requires Wyckoff to request variances from any of staff's Plan and Procedures which will be replaced by a NYSDAM Plan provision for the review and written approval of the Director of OEP, prior to construction.

58. In his February 8, 2006 letter, Mr. Joe Cornell indicates that with respect to noise issues, Wyckoff's application indicates that "Wyckoff has proposed to lease the parcel thereby removing this location as a Noise Sensitive Area (NSA)."¹⁶ Mr. Cornell asserts that he has not been approached by Wyckoff about leasing the parcel, and that Wyckoff should not assume that no one will be residing at that location.

59. In its response on February 15, 2006, Wyckoff clarified that Mr. Cornell is correct in that Wyckoff has no present plans to lease that parcel. Wyckoff indicates that the statement was "erroneously included because at one point in the past Wyckoff had considered such a plan, contingent upon discussions with Mr. Cornell. That plan, however, has long since been abandoned." Nevertheless, as discussed in the EA, since this location is no longer occupied, we do not consider this location as an NSA.¹⁷ However, as explained in the EA, our staff has included Wyckoff's projected L_{dn} noise

¹⁶ See Wyckoff Application, Exhibit Z-1 (Applicant Prepared Environmental Assessment).

¹⁷ EA at 23.

level at this location identified as NSA2 (vacant mobile home on Timmerman Road). Wyckoff projects that the L_{dn} noise level at this location would be 41.4 dBA, which would be below an L_{dn} of 55 dBA--the level which protects the public from outdoor activity interference and annoyance in residential areas.

60. In his comments, while Mr. Joe Cornell generally agrees that the relocation of the compressor site to the south and the lowered impacts of drilling and pipeline construction will be positive changes, he asserts that the approval or permits for the South Lateral being phased in should be granted separately at the time of the expansion to allow for a thorough review at that time.

61. The South Lateral was analyzed in the original EA for this project and approved by the Commission's October 2003 Order. We note that if Wyckoff proposes to make any changes to the South Lateral in the future, Environmental Condition No. 5 of this order requires Wyckoff to file detailed alignment maps/sheets and other environmental information for areas that would be used or disturbed and have not been previously identified, and these areas must be approved by the Director the Office of Energy Projects (OEP) before construction. Further, the EA recognizes that since Wyckoff is not expected to construct the southern pipeline for up to three years, the list of threatened or endangered species may change in the area.¹⁸ Therefore, Environmental Condition No. 14 of this order requires Wyckoff to consult with the U.S. Fish and Wildlife Service to determine the need for surveys possibly required for threatened and endangered species on the southern pipeline route before construction.

62. On March 16, 2006, the United States Department of Agriculture, Natural Resource Conservation Service (NCRS) filed a late response to the NOI that was not addressed in the EA. As detailed below, the NCRS lists a number of suggestions for the Commission's consideration.

63. The NCRS suggests that during the demolition and construction processes, provisions be included in the contract specifications to ensure that demolition and construction debris and waste are handled in such a manner to prevent discharge into any water course, wetland or other waterbody. Wyckoff must use our FERC staff's Wetland and Waterbody Construction and Mitigation Procedures (Procedures) and the Upland Erosion Control Revegetation, and Maintenance Plan (Plan) for this project, which contain mitigation measures for disposal of construction debris and wastes.

¹⁸ EA at 13-14.

64. The NCRS suggests that sediment due to erosion of the project sites be controlled in a manner such that it does not enter any water body or water course. We note that our staff's Plan and Procedures contain measures to minimize erosion-related sediment from entering waterbodies.

65. The NCRS suggests that the contractors' quality control responsibilities and the Department of Transportation's quality assurance responsibilities ensure that the aforementioned control measures are instituted and maintained. Environmental Condition No. 8 of this Order requires Wyckoff to employ at least one environmental inspector who is responsible for monitoring and ensuring compliance with all mitigation measures required by this order.

66. The NCRS suggests that consideration be given to alternatives that would minimize altering the course of a waterway. Construction activities that cross wetlands and waterbodies on this project will be temporary. Wyckoff will cross wetlands and waterbodies using the requirements of our Procedures. The course of any waterbody will not change, and the waterbody will be restored after construction in accordance with our staff's Procedures.

67. The NCRS further suggests that should agricultural land be needed for this project, the amount of land, its location, and the process whereby ownership is transferred, be such that any farm business remains a viable operation after completion of the process. We note that since Wyckoff's proposed amendment to its certificate authority is to construct the compressor station and drill the new wells on property it owns, it will not be acquiring land used by farm businesses for that portion of the project. However, any project pipelines that cross agricultural land will not affect future farmland use after construction is completed.

68. Lastly, since several landowners filed comments regarding the project, we will require Wyckoff, in Environmental Condition 7, to develop a dispute resolution procedure for this amended project, as we required in the original certificate order in Docket No. CP03-33-000.

69. Based on the discussion in the EA, we conclude that if the project is constructed and operated in accordance with Wyckoff's amended application and supplements, approval of these proposals would not constitute a major federal action significantly affecting the quality of the human environment.

70. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities.

However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction and operation of facilities approved by this Commission.¹⁹

71. Wyckoff shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Wyckoff. Wyckoff shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

72. The Commission, on its own motion, received and made a part of the record all evidence, including the application, supplements, and exhibits thereto, submitted in this proceeding, and upon consideration of the record,

The Commission orders:

(A) Wyckoff's certificate of public convenience and necessity to construct and operate facilities in Docket No. CP03-33-000 is amended, as described more fully in the application and in the body of this order.

(B) Wyckoff's amended certificate authority is conditioned upon Wyckoff's compliance with all applicable Commission regulations under the NGA, particularly the general terms and conditions set forth in paragraphs (a), (c), (e), and (f) of Section 157.20 of the regulations.

(C) Wyckoff's amended certificate authority is conditioned upon Wyckoff's compliance with the environmental conditions set forth in Appendix A to this order.

(D) Wyckoff's facilities must be constructed and made available for service within three years from the date this order is issued, pursuant to paragraph (b) of Section 157.20 of the Commission's regulations.

(E) The certificate issued to Wyckoff in this proceeding is further conditioned upon Wyckoff's compliance with the engineering conditions set forth in Appendix B to this order.

¹⁹ See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

(F) Wyckoff shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Wyckoff. Wyckoff shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary

APPENDIX A

Environmental Conditions

As recommended in the EA, this authorization includes the following conditions:

1. Wyckoff shall follow the construction procedures and mitigation measures described in its application, and supplements (including responses to staff data requests) and as identified in the EA, unless modified by this Order. Wyckoff must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:
 - a. the modification of conditions of this Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction (and operation).
3. **Prior to any construction**, Wyckoff shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors, and contractor personnel would be informed of the environmental inspector's authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.
4. The authorized facility location(s) shall be as shown in the EA, as supplemented by filed alignment sheets. As soon as they are available, and before the start of

construction, Wyckoff shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Wyckoff's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to this Order must be consistent with these authorized facilities and locations. Wyckoff's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Wyckoff shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP before construction in or near that area.

This requirement does not apply to extra workspace allowed by the Upland Erosion Control, Revegetation, and Maintenance Plan, minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;
- c. recommendations by state regulatory authorities; and
- d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

6. **Within 60 days before construction begins**, Wyckoff shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Wyckoff would implement the mitigation measures required by this Order. Wyckoff must file revisions to the plan as schedules change. The plan shall identify:

- a. how Wyckoff would incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
- b. the number of environmental inspectors assigned per spread, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
- c. company personnel, including environmental inspectors and contractors, who would receive copies of the appropriate material;
- d. the training and instructions Wyckoff would give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change);
- e. the company personnel (if known) and specific portion of Wyckoff's organization having responsibility for compliance;
- f. the procedures (including use of contract penalties) would follow if noncompliance occurs; and
- g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - (i) the completion of all required surveys and reports;
 - (ii) the mitigation training of onsite personnel;
 - (iii) the start of construction; and
 - (iv) the start and completion of restoration.

7. Wyckoff shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the ROW. Prior to construction, Wyckoff shall mail the complaint procedures to each landowner whose property would be crossed by the project.

- a. In its letter to affected landowners, Wyckoff shall:
 - (i) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a

- landowner should expect a response;
 - (ii) instruct the landowners that, if they are not satisfied with the response, they should call Wyckoff's Hotline; the letter should indicate how soon to expect a response; and
 - (iii) instruct the landowners that, if they are still not satisfied with the response from Wyckoff's Hotline, they should contact the Commission's Enforcement Hotline at (888) 889-8030.
 - b. In addition, Wyckoff shall include in its weekly status report a copy of a table that contains the following information for each problem/concern:
 - (i) the date of the call;
 - (ii) the identification number from the certificated alignment sheets of the affected property;
 - (iii) the description of the problem/concern; and
 - (iv) an explanation of how and when the problem was resolved, would be resolved, or why it has not been resolved.
- 8. Wyckoff shall employ at least one environmental inspector per construction spread. The environmental inspector(s) shall be:
 - a. responsible for monitoring and ensuring compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;
 - d. (a full-time position, separate from all other activity inspectors);
 - e. responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
- 9. Wyckoff shall file updated status reports prepared by the (head) environmental inspector with the Secretary **on a biweekly basis** until all construction and restoration activities are complete. On request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

- a. the current construction status of the project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspector(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - c. corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;
 - e. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by Wyckoff from other federal, state or local permitting agencies concerning instances of noncompliance, and Wyckoff's response.
10. Wyckoff must receive written authorization from the Director of OEP **before commencing service from each phase of the project**. Such authorization would only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the project are proceeding satisfactorily.
11. **Within 30 days of placing the certificated facilities in service**, Wyckoff shall file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been (constructed/abandoned/installed) in compliance with all applicable conditions, and that continuing activities would be consistent with all applicable conditions; or
 - b. identifying which of the certificate conditions Wyckoff has complied with or would comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. Wyckoff shall file detailed alignment sheets (scale: 1-inch equal 400 feet) showing:
 - a. the certificated route and the proposed north pipeline route from MP 0.0 on both routes to their point(s) of intersection and continuing

- to MP 1.81 on the proposed north pipeline route; and
- b. the certificated route and the proposed south pipeline route from MP 0.0 on both routes to their point(s) of intersection.

These alignment sheets shall be filed for the review and written approval of the Director of the Office of Energy Projects, prior to construction. Wyckoff shall also file a cross-reference table that identifies the MPs of all streams and wetlands listed in the original EA compared to the amended project's MPs.

13. **Prior to construction,** Wyckoff shall file:
 - a. a wetland delineation survey report for the wetlands impacted by the new laterals and changes to the project. The survey report should provide an estimate of the total wetland acres affected by the amended project, including those in staging areas, extra work spaces, pipe storage areas, and all other areas of land disturbance.
 - b. acreage permanently converted from forested to scrub/shrub or emergent.
14. Wyckoff shall consult with the appropriate field office of the USFWS to determine the need for and methodology of surveys possibly required for threatened and endangered species on the southern pipeline route. Wyckoff shall not begin construction activities of the southern pipeline until:
 - a. the staff receives comments from the USFWS for the south pipeline route;
 - b. the staff completes formal consultation with the USFWS, if required; and
 - c. Wyckoff has received written notification from the Director of the Office of Energy Projects (OEP that construction or use of mitigation may begin.
15. Wyckoff shall consult with the NYSDAM on use of the specifications in NYSDAM's Plan that are more stringent than the FERC staff's Plan and Procedures and for construction and restoration of the project, where appropriate. Wyckoff should file a summary that identifies the provisions it would use from NYSDAM's Plan that are more stringent than the FERC staff's Plan and Procedures, and request variances from any of staff's Plan and Procedures which would be replaced by a NYSDAM Plan provision for the review and written approval of the Director of OEP, prior to construction.
16. Wyckoff shall conduct a noise survey at the Wyckoff Compressor Station to verify that the noise from the compressor station operated at full load does not exceed an

L_{dn} of 55 dBA at the NSAs and file the results of the noise survey with the Secretary **no later than 60 days after placing the compressor station in service.** If the noise attributable to the operation of the compressor station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, Wyckoff shall install additional noise controls to meet that level **within 1 year of the in-service date.** Wyckoff shall confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the Secretary **no later than 60 days after the additional noise controls are installed.**

APPENDIX B

Engineering Conditions

1. The maximum inventory of natural gas stored in Wyckoff Storage Field shall not exceed 11,846 MMcf (including remaining native gas-in-place) (6,966 MMcf in Onondaga reef and 4,880 MMcf in Oriskany Sandstone) at 14.73 psia and 60 degrees F. Maximum shut-in reservoir pressure shall not exceed 1,790 psi bottomhole, without prior authorization of the Commission.
2. Wyckoff shall submit semiannual reports containing the following information (volumes shall be stated at 14.73 psia and 60 degrees F, and the pressures shall be stated in psia):
 - (a) The daily volumes of natural gas injected into and withdrawn from the storage reservoirs.
 - (b) The volume of natural gas in each reservoir at the end of reporting period.
 - (c) The maximum daily injection and withdrawal rates experienced during the reporting period. Average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured.
 - (d) Results of any tracer program by which the leakage of injected gas may be determined. If leakage of gas exists, the report should show the estimated total volume of gas leakage, the volume of recycled gas and the estimated remaining inventory of gas in the reservoir at the end of the reporting period.
 - (e) Any surveys of pressures in gas wells, and the results of back-pressure tests conducted during the reporting period.
 - (f) The latest revised structural and isopachous contour maps showing the location of the wells and the location of gas or gas water contact. These maps need not be filed if there is no material change from the maps previously filed.

- (g) For the reporting period, a summary of wells drilled, worked over, or recompleted with subsea depth of formation and casing settings. Copies of any new core analyses, back-pressure tests, or summary of well logs.
- (h) Discussion of current operating problems and conclusions.
- (i) Such other data or reports which may aid the Commission in the evaluation of the storage project.
- (j) Reports continue to be filed semi-annually until the storage inventory volume and pressure have reached or closely approximated the maximum permitted in the Commission's order. Thereafter, the reports shall continue on a semi-annual basis for a period of one year.